Page 2, line 13

According to the invention, there is provided a method of providing a display output for at least two display devices using a single controller system. The method comprises:

providing a first display controller able to read from a graphics memory at least two first surfaces into at least two first pixel paths, convert the pixel format of at least one of the at least two first surfaces, scale at least one of the at least two first surfaces, and combine (at least one of blending and overlaying) the at least two first surfaces, where at least one of the first pixel paths supports any one of RGB and YUV pixel format and at least one of the pixel paths supports at least RGB pixel format; providing a second display controller able to read from a graphics memory at least two second surfaces, convert the pixel format of at least one of the at least two second surfaces, scale at least one of the at least two second surfaces, and combine the at least two second surfaces, where at least one of the pixel paths supports any one of RGB and YUV pixel formats and at least one of the pixel paths supports at least an RGB pixel format;

B2 cont'd

causing the first display controller to select and read the first surfaces, convert the first surfaces into a like first format at least when the first surfaces are not all in the like first format, scaling at least one of the first surfaces, combining (at least one of blending and overlaying) the first surfaces to obtain a blended first surface, and outputting the combined first surface to provide a first output stream of pixel data;

causing the second display controller to select and read the second surfaces, convert the second surfaces into a like second format at least when the second surfaces are not in the like second format, scaling at least one of the second surfaces, combining (at least one of blending and overlaying) the second surfaces to obtain a blended second surface, and outputting the combined second surface to provide a second output stream of pixel data. In this way, flexibility is provided by selection of the first and second surfaces as well as scaling and combining of the first and second surfaces, whether the surfaces are in RGB format, YUV format or mixed RGB/YUV format. It will be appreciated that any of the surfaces could be common between the

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B2 cancel.

two controllers. This enables the same surface to be displayed on the two displays in different ways, formats and blended with different surfaces.

Page 6, line 22

B3 cancel.

Fig. 1 is a schematic block diagram of a single controller system for providing dual display output according to the preferred embodiment;

Page 6, line 24

B4 cancel

Fig. 2 is a schematic block diagram of a controller reading two surfaces of any of a plurality of video formats, carrying out conversion, if necessary, and scaling and combining (overlaying and/or blending) in accordance with the preferred embodiment;

Page 6, line 28

B5 cancel.

Fig. 3 is a pictoral diagram of two different surfaces in graphics memory showing the result of combining with sub-picture blending and overlaying; and

Page 6, line 30, please insert the following new paragraph:

B6 cancel

Fig. 4 is a schematic block diagram of an embodiment in which the 3D drawing engine is used to scale a DVD YUV surface and/or blend a graphic surface to create a YUV overlay surface for the first display and/or second display.

Page 8, line 18, please insert the following new paragraph:

B7 cont'd

In the embodiment of Figure 4, the YUV surface is processed by the drawing engine 60 in order to blend using the 3D drawing engine capability within the display controller apparatus to create a blended YUV surface. This blended surface is like the one which could also be achieved using a blending unit, namely the logo is blended with the source video surface to generate the YUV overlay surface which is then read for display by CRTC2 in full screen output and separately read by CRTC1 for display within a window in the desktop.